

UNITED STATES PATENT AND TRADEMARK OFFICE

th

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/658,201 09/10/2003		Dierk Schroder	P23958	3231	
7055	7590 12/13/2005		EXAM	EXAMINER	
	UM & BERNSTEIN, P ND CLARKE PLACE	ROSENBERGER, RICHARD A			
RESTON, V			ART UNIT	PAPER NUMBER	
-			2877		
			DATE MAILED: 12/13/200	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicat	ion No.	Applicant(s)	Applicant(s)			
Office Action Summary		10/658,2	10/658,201 SCHRODER ET AL.		AL.			
		Examine	er	Art Unit				
			A. Rosenberger	2877				
Period fo	The MAILING DATE of this commun or Reply	nication appears on th	e cover sheet with	the correspondence a	ddress			
WHIC - Exter after - If NO - Failu Any I	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MISSIONS OF THE MISSION O	MAILING DATE OF T s of 37 CFR 1.136(a). In no e munication. tatutory period will apply and y will, by statute, cause the ap	HIS COMMUNICA vent, however, may a reply will expire SIX (6) MONTHS plication to become ABAN	TION. be timely filed from the mailing date of this DONED (35 U.S.C. § 133).				
Status					,			
1)	Responsive to communication(s) file	ed on .						
•	· · · · · · · · · · · · · · · · · · ·	2b)⊠ This action is	non-final.					
′=	Since this application is in condition	<i>,</i> —		s, prosecution as to th	ne merits is			
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠ Claim(s) <u>1-51</u> is/are pending in the application.								
-	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
	☑ Claim(s) <u>1-51</u> is/are rejected.							
· · · · · · · · · · · · · · · · · · ·	Claim(s) is/are objected to.							
8)	Claim(s) are subject to restri	ction and/or election	requirement.					
Applicati	on Papers							
9) 🗀 '	The specification is objected to by the	ne Examiner.						
,—	The drawing(s) filed on is/are) objected to by	the Examiner.				
,—	Applicant may not request that any obje	•	•					
	Replacement drawing sheet(s) including	g the correction is requi	red if the drawing(s)	is objected to. See 37 C	FR 1.121(d).			
11)	The oath or declaration is objected t	o by the Examiner. N	ote the attached O	office Action or form P	TO-152.			
Priority u	ınder 35 U.S.C. § 119							
12)🛛	Acknowledgment is made of a claim	for foreign priority u	nder 35 U.S.C. § 1	19(a)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies	of the priority docum	ents have been re	ceived in this Nationa	ıl Stage			
	application from the Internation	onal Bureau (PCT Ru	le 17.2(a)).					
* S	see the attached detailed Office action	on for a list of the cer	tified copies not red	ceived.				
Attachmen	, ,		_					
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (I	DTO 048\	4) Interview Sum	ımary (PTO-413) fail Date				
3) 🛛 Inform	e of Draftsperson's Patent Drawing Review (i nation Disclosure Statement(s) (PTO-1449 o r No(s)/Mail Date <u>09/10/2003</u> .			mal Patent Application (PT	ΓO-152)			

Application/Control Number: 10/658,201 Page 2

Art Unit: 2877

1. Claims 11, 13, and 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 calls for "pneumatically measuring the at least one physical property".

Claim 11 is dependent from clams 1, which calls for "optically measuring at least one physical property". This is unclear and contradictory, as claim 1 and claim 11 call for different types of measurements of measuring.

In claim 13, "the predetermined measurement range" has no antecedent basis.

In claim 26, "the filter bars" has no antecedent basis and the claim in unclear if it is intended to be directed to measuring "bar shaped articles" as in the preamble or "filter bars" as in the last line of the claim. Also, the preamble calls the claimed structure "a device for conveying bar-shaped article to a magazine", but no conveying structure is claimed.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2877

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 4, 5, 8, 14, 16, 25, 34, 37, 38, 40, 41, 46, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Cholet (US 5,311,291).

As in claim 1, claim 1 shows a process for measuring a bar-shaped object (such as a cigarette) in a conveyor line (see the disclosed movement of the object in column 3, lines 10-11 and 18-19). At least one physical property of the object is measured; diameter is a physical property. AS in claim 2, diameter is a geometric property, and as in claim 5, it is "at least one of a length and a diameter".

As in clam 4, the bar-shaped article is a cigarette, which is an article of the tobacco processing industry.

As in claim 8, the property is measured "several times" (column 3, lines 20-23).

As in claim 14, a start signal is generated (by phototransistor 8).

The reference teaches determining a "cigarette present" signal (column 3, line 48) to determine if a measurement is to be made; once the cigarette is present, the measurements will be made, and thus will be made in the end area" of the cigarette as in claim 16.

As in claim 25, the reference comprises an optical measuring device structured and arranged to measure at least one physical property of a bar-shaped object. As to the measurement of "filter bars" (see the rejection under 35 USC 112, above), there is no claimed structure relating the measurement specifically to filter bars, which is, if that is what is intended, only a non-limiting statement of intended use, which does not limit

Art Unit: 2877

the claim structure. Also is claim 25 the preamble language calling the device one "for conveying bar-shaped objects to a magazine" is not supported by any structure in the claim and is no more than a non-limiting statement of intended use.

As in claim 28, the device is positioned to measure a geometric property of the articles.

As in claim 29, the device is positioned along a "conveyor line arranges to convey the bar-shaped articles"; see the comment at claim 1 above.

As in claim 34, the device of the reference comprises at least one light source (1) and at least one detector (7).

As in claim 37, the device of the reference comprises at least one mirror and a mirror arrangement (the facets of 3 and 4 are mirrors, and comprise an arrangement).

As in claim 38, the device of the reference comprises an evaluating unit (10). Similarly to above for claims 40 and 46.

The device measured at least one of a length and a diameter (a diameter), as in claims 41 and 47.

5. Claims 1, 2, 5, 12-20, 22, 23, 25, 28, 29, 34, 38-41, 44, 46, 47, and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Jung (US 4,171,161).

Jung shows a process (claim 1) and device (claims 25, 40, 46) for measuring a physical property of a bar-shaped object (10) that is being conveyed (claim 29) though the measuring device. It can measure a geometrical property (claims 2, 28) such as length (claims 5, 41, 47). The device is arranged to have two measuring points (22, 23) arranged along a conveying zone of the articles, (claim 17), which concurrently detect

Art Unit: 2877

the position of both ends (claims 16, 18, 44 and 50) to measure the length. The measurement comprises a light source and at least one sensor (claim 34) impinging light from a light source (claim 20) on the object and the two measuring points (claim 19), and measuring the area of the article impinged upon the light source and the brightness profile as detected by the sensors (claim 23) at the measuring point (claim 22).

The reference teaches an evaluating device (claim 38) for determining whether the measured physical property falls within a predetermined measurement range (comparator 41) (claim 12) and to eject (ejection apparatus 45 in figure 4c) the object it the physical property is outside of the range (claims 13, 39).

As shown in figure 1, there is a "light barrier" (50) (claim 15) which triggers a start signal (claim 14).

6. Claims 21 and 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (US 4,171,161).

The reference does not appear to teach that the light source can be a laser. It would have been obvious to use a laser as the light source because lasers are well-known and commercially available light sources commonly used in measuring apparatuses. Likewise, the use of any appropriate known and available sensor would have been obvious.

7. Claims 1, 2, 5, 25, 28, 29, 34, 35, 38, 40, 41, 46, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Marshall (US 4,895,449).

Art Unit: 2877

Marshall shows an optical measuring device which measured the diameter of a bar-shaped object (claims 1, 2, 5, 25, 28, 40, 41, 46, 47) as it is conveyed (claim 29), comprising a light source (2), at least one sensor (8,9), and an evaluating device (column 2, lines 13-15) (claimo 38). As in claim 35, the light source may comprise a laser (column 3, line 39) and the detector may comprise a line sensor (column 2, lines 10-15).

8. Claims 40, 41, 45, 46, 47, and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Harris et al (US 4,043,673).

See figure 9, which shows concurrently measuring two orthogonal diameters of a bar-shaped object in order to measure the diameter of the bar-shaped object as in claims 45 and 51, using an instrument that meets the limitation of at least claims 40, 41, 46 and 47.

9. Claims 25, 32, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hapke et al (US 5,715,843).

See lines 1-5 of the abstract of the reference.

10. Claims 1, 6, 7, 9, 10, 25, 36, 40, 41, 42, 46, 47, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirschtein (US 4,198,165).

Kirschstein shows a system which measures both the length and the diameter of a object (column 1, lines 6-10) using a single optical system which measures the to dimensions with a single measuring arrangement which measures them to at the same time in the same measuring operation.

Art Unit: 2877

11. Claims 3, 26, 27, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of the above applied rejections.

Page 7

All of the rejections measure a property of bar-shaped articles; it would have been obvious to use any of the measuring systems above to measure any type of rod- or bar-shaped objects of which length and/or diameter measurements would be of interest, including filter bars use in the tobacco processing industry. The use of any appropriate handling mechanism to convey and otherwise deposit the measured objects would have been obvious. It is noted that the instant specification does not give details of the handling means, but incorporates the material by reference (page 11, paragraph [0073] from what appears to be (it appears that no copy has been provided) the invention of another.

12. Claims 43 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirschstein in view of Jung et al.

It is known in the art that it is useful to measure both diameter and length of a produce; see Kirschtein. Jung shows it is known to measure both length and diameter (see figures 5 and 6) using an instrument that operates by detecting the amount of light that is blocked by the article being measured. It would have been obvious to use both of the type taught by Jung in a single system because it is known, as taught by Kirschstein, that it is useful to measure both. Combining them to measure the two simultaneously would have been obvious because this would eliminate the need to duplicate the light

Art Unit: 2877

Page 8

sources and triggering mechanisms as shown in figure 1 of Jung and thus simplify the system and reduce the cost and complexity.

- 13. A copy of the German Patent application, German Patent Application No. DE 101 55 292.0, cited, incorporated by reference, and subject matter therefrom apparently claimed to least some degree will need to be supplied, and, if the application has been filed in the United States the U.S. application will need to be identified. It if further noted that "essential subject matter", that is, subject matter necessary to support the claims, cannot be incorporated by reference form a foreign application; see 37 CFR 1.57. Thus, the claimed material incorporated from the German document may need to be physically incorporated into the specification.
- 14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A Rosenberger whose telephone number is (571) 272-2428. The examiner can normally be reached on Monday through Friday during the hours of 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. A. Rosenberger 9 December 2005

Richard A. Rosenberger
Primary Examiner